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1. ELEMENTS OF A COMPREHENSIVE PROGRAM

The primary written elements supporting a comprehensive OSH program are policies, programs, and procedures. Each of these interrelated documents is described below.

It is sometimes very difficult to decide when something is a policy, plan or procedure, and sometimes it is a judgment call on the part of the writer. These questions can help you decide:

Policies. A policy is a guiding principle or philosophy that provides direction for an organization. A written policy statement conveys senior management commitment and expectations for overall performance. A policy may be written to communicate to the general employee population or a specific group of employees. Typically, a policy does not establish requirements or define how an activity is to be performed. These roles usually are filled by programs and procedures.

Programs. Written programs are used to describe how elements of the OSH program are formally implemented. Generally, programs will describe the administration and organizational aspects of a business unit, technical discipline, or operation; the roles and responsibilities of individuals who must interact to make the program successful; and the interfaces among those within and outside of the program. Programs may, in a general way, describe the procedures that must be performed for the program to function properly.

Goals and Objectives. An organization's worker protection policy should flow down into specific goals and objectives, which in turn are reflected in the written program. Goals and objectives should be measurable for use as performance indicators.

Procedures. Procedures give explicit instructions for accomplishing a program's tasks. Procedures stipulate precisely how tasks are to be performed. Depending on the complexity of the program, there may be several layers of procedures.

2. POLICIES

The most important thing to remember about a policy is that it is a vehicle for management to communicate their expectations. So, it must be clear to all employees what is meant by the policy. Unclear policy leads to confusion and frustration and can cause more harm than the lack of a policy.

Policy that will not be followed should never be issued because it creates an undesirable future liability. This especially applies if it is proven that management never intended to implement the policy and it was a "paper tiger." If you do not intend to follow it, then do not say it.

Policy must be realistic. Management cannot ask employees to do something that is impossible or something for which they are not equipped. A policy to "not have any accidents" communicates to employees that management is not interested in a strong safety program.

A good policy is concise and clear, and may contain the following items:

- A course for the OSH program adopted by management.
- Management's verbal expression of the direction to be followed. It creates consistency and continuity.
- Content that is general in nature, briefly stated, and applicable to employees.
- An assurance that OSH program efforts will be carried out. It supports supervisors in their enforcement of OSH rules and safe work practices.
- A checkpoint whenever safety and health appear to conflict with production or other objectives.
- The signature of the highest ranking company official on the site.
- Statements built on current Department-wide ES&H Policy.

Example of an OSH Policy Statement

"XYZ Operations Office is committed to providing a safe and healthful workplace for employees. These conditions shall be ensured through an aggressive and comprehensive Federal Employee Occupational Safety and Health (FEOSH) program. The Operations Office regards employee safety and health as a priority and is committed to developing, implementing, and improving OSH practices that will afford optimal protection to employees and enable the Operations Office to continually improve the quality of its OSH performance. The safety and health of employees shall take precedence whenever conflicts with production or other objectives arise."

A written statement is only one method for communicating OSH policy. Policies are communicated by word and example. Ways of communicating in writing include posting a signed policy statement on employee bulletin boards and prominent locations throughout the workplace; providing it in the information given to new employees; including it in company newsletters; and adding it to company letterhead.

A new employee starts learning about the company's attitude toward safety and health from the first day at work. By discussing job hazards and providing training in safe work procedures and practices, both one-on-one and in group meetings, supervisors ensure that the employee understands that safety and health has a high priority in the company. The supervisor's continuing emphasis on safety and health reinforces this positive company attitude.

Senior managers, middle managers, and supervisors express the company's policy toward workplace safety and health by their daily example. The principles posted on bulletin boards and discussed at meetings are useless if management does not follow and enforce them. Management must set an example by properly using PPE, safely operating equipment, holding supervisors accountable for their OSH responsibilities, and consistently running all aspects of the business in a safe and healthful manner.

Specific OSH Policies

On occasion, it may be necessary for management to more clearly state policies on specific issues. Such issues may arise as a result of accidents or injuries, near-misses or incidents, or audit or assessment findings. Sometimes this is merely a restatement or a clarification of existing policy, but at other times it may involve the development of a new and very specific policy for a particular hazard or concern. Such policies are communicated by the same means as the more general OSH policies, that is, by bulletins, notices, letters, etc. They may also be communicated by management presentations which address those special issues. Specific OSH policies may be written for such concerns as OSHA compliance; reporting of accidents, injuries, and illnesses; or compliance with existing OSH procedures, as well as many other areas.

3. WRITTEN FEOSH PROGRAMS

A large number of integrated activities are required to operate a successful OSH program. Additionally, all employees on the site should be involved, in some manner, in the administration and implementation of the OSH program. Therefore, it is necessary to document the activities so that all employees can effectively discharge their responsibilities. Written programs developed in support of the overall OSH effort, as established by the policy, will be fairly comprehensive but broad in scope.

DOE Order 440.1, paragraph 4.a., requires DOE elements to implement a written worker protection program that

- Provides a place of employment free from recognized hazards that are causing or likely to cause death or serious physical harm to employees.
- Integrates all elements and functional areas covered in DOE Order 440.1, 29 CFR Part 1960, and other related site-specific worker protection activities.

The written program should describe an integrated management organization and support systems that fully satisfy DOE worker protection requirements of all technical disciplines. The program should reflect the principles and expectations established in the written OSH policy described in the previous section. It should clearly convey the framework for the program and describe how the program works.

It is not necessary to develop separate written program documents for the FEOSH program when the necessary topics are addressed in other site-specific program management documents. The Implementation Guide for DOE Order 440.1 provides general information and methodologies that DOE finds acceptable in meeting safety and health requirements, including those for FEOSH.

Program Coverage

All elements of the safety and health program—including management leadership, employee involvement, worksite analysis, hazard prevention and control, and worker protection training—are part of the written program. At a minimum, the written program should do the following:

- Identify roles, responsibilities, and authorities for implementing the program.
- Identify taxonomy of other documentation related to the organization's worker protection program (including policy, objectives, and operating procedures).
- Include a system for ensuring that employees comply with safe and healthful work practices, which includes provisions for recognizing employees for following safe and healthful work practices, training and retraining programs, disciplinary actions, or any other means that ensure employee compliance with safe and healthful work practices.
- Identify the mechanisms for involving workers in the worker protection program.
- Include a system for communicating with employees about matters relating to worker protection, including provisions designed to encourage employees to inform their employer of hazards at the worksite without reprisal.
- Include training of assigned personnel in hazard recognition and control.
- Include procedures for workers and supervisors to identify and evaluate workplace hazards and qualified worker protection professionals to conduct periodic inspections and identify unsafe conditions and work practices.
- Include a procedure to investigate and report occupational injuries and illnesses.
- Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices, and work procedures in a timely manner based on the risk associated with the hazard.
- Provide for adequate initial and recurring training.
- Establish measures to track OSH performance.
- Include provisions for periodic program evaluation.
- Establish procedures for ensuring that contractor employees and visitors are adequately protected when working onsite and that Federal employees are adequately protected from hazardous contractor operations.

Specific Areas to Cover

Listed below are *examples* of specific technical disciplines that the written program should address, as applicable.

- Occupational Safety
- Motor Vehicle Safety
- Industrial Hygiene
- Occupational Medicine
- Radiological Protection
- Explosives Safety
- Firearms Safety

- **Emergency Preparedness**
- Laser Safety
- Fire Protection

Standards-**Mandated Programs**

Many OSHA standards require site-specific programs or procedures that need to be addressed, such as:

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- 1910.95, Hearing Conservation
- 1910.134, Respiratory Selection and Use
- 1910.146, Confined-Space Entry
- 1910.1200, Hazard Communication

An example of safety and health program elements is in **Appendix 3-1**.

At a particular site, various technical disciplines and standards-mandated programs may not be the responsibility of the OSH organization, but they must be considered and coordinated as part of the overall FEOSH program.

Making It Work

The written program should be concise, measurable, and written with the users in mind. The format should allow managers, supervisors, and workers to quickly understand roles and responsibilities as applicable to them. Remember, the reason for having a documented program is to communicate activities that assist people in their efforts to prevent accidents, injuries, and illnesses—not just to document existing ways of doing business. The organization must include in the program only those items that they are willing to follow; in other words, management must be ready to "Walk the Program."

The recent revision of the DOE directive covering FEOSH (DOE Order 440.1) and its associated guidance (DOE G-440.1/A-0) provides organizations with an excellent window of opportunity to revitalize their FEOSH programs. Getting workers and supervisors involved in the preparation of the DOE Element's written program, either as a special project or through safety and health committees, will promote early acceptance of and support for the program.

To get started, the organization must evaluate existing written documentation and status of compliance vis-à-vis requirements contained in 29 CFR Part 1960 (see **Appendix 10-1** for evaluation criteria), DOE Order 440.1, and DOE G-440.1/A-0 to understand the baseline and determine areas that need improvement. A strategic planning session to establish the policy, goals, and objectives, along with a plan detailing how the FEOSH program will be written or rewritten, provides the roadmap needed to complete the project.

PROCEDURES 4.

Work-related safety and health activities should be conducted in a deliberate and controlled manner where appropriate. In addition to training and day-today supervision, providing sound procedures and requiring workers to use them are among the most formal, direct, and effective methods available to

facility managers to ensure that their operations meet this objective. Procedures provide managers with a critical tool to communicate expectations as to how individuals are to perform specific activities.

To be effective management tools, procedures must integrate the policies, rules, parameters, processes, controls, products, culture, physical facilities, equipment, material, and people necessary to operate safely. Procedures must be technically and operationally accurate, up-to-date, and easy to follow, or workers will lack confidence in them and may not use them.

In addition to establishing how individual tasks are to be completed, procedures also represent a key management control system. Procedures contribute in several aspects:

- Codifying management philosophy—extending the philosophy of operations into a tangible method for achieving compliance with the direction established for the facility.
- Complementing other management control systems—providing a method for implementing the various adminstrative, design, and technical control systems.
- Fulfilling commitments—specifying and documenting how requirements and obligations are accomplished.

Types of Procedures

Because procedures must address how all operations and processes are to be performed—from administrative to technical—the following types of procedures are needed:

- Management control procedures (administrative procedures) define
 the communication and coordination activities necessary to carry out
 technical, management control, and design control activities. These
 procedures describe the processes that ensure all of the various
 functions are effectively integrated and requirements are applied
 appropriately throughout the lifetime of the facility or project.
- Technical procedures prescribe precisely how to accomplish the various technical tasks associated with starting up, testing, operating, and maintaining equipment and systems.
- **Emergency and alarm response procedures** define the steps to take when an abnormal condition exists.

Each of these procedure types is slightly different based on the intended purpose and use of the procedures, the considerations in effect at the time of use, the level of detail required to allow the task to be accomplished, the typical user of the procedure, and the degree to which compliance with the procedure must be documented.

Some facilities have very rigorous procedures that must be followed to the letter, while others have procedures that provide general guidance. Some facilities have identified operating procedures as rigorous, and administrative procedures as flexible (guidance). If a procedure *must* be followed as it is written (e.g., in the case of operating a nuclear reactor), then

the procedure should say so. If the procedure is a general guidance document, then it should be stated.

All of the items included in a good policy are applicable here as well. In place of the REQUIREMENTS section, there should be a PROCEDURE section that details how the job is to be performed. Generally, these steps are numbered and perhaps divided into sections for easier reading and use.

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The most important thing about a procedure is that it must be correct and useful to the end users. So, the end users must be involved in its development. They must have a say in the format, how the procedure is written, and what is in the procedure. After all, they are the ones that will have to use this tool, so it is very important to know who the users are and ensure their involvement.

Determining if Procedures Are Needed

Developing, implementing, and managing a formal written procedure involves a significant resource commitment. Some considerations for determining if a procedure is needed are the following:

- Consequences of failure are significant.
- Complexity of the operation or activity exceeds the resident knowledge of assigned personnel.
- Requirements are specified by DOE Orders, OSHA standards, or accepted consensus standards.
- Results of a job safety analysis or other hazard analysis indicate the need.
- Task is non-routine.
- Requirements need to be documented and interpreted to ensure compliance and communicate management direction.
- Establishment of performance standards against which individuals or the organization will be evaluated and consistent application of such standards are necessary.
- Requirements are subject to change, and changes need to be documented and disseminated for implementation.
- Multiple means exist for completing a task, and a particular means is specified.

A procedure may not be needed if there are other appropriate means of communication that can accomplish the same objectives (e.g., training, booklets, supervisory control, or signs). Consideration should be given to integrating requirements into other existing or planned processes or procedures instead of creating new procedures that are not fully integrated with the existing management control system. In some cases, employees may have sufficient knowledge through education or experience to perform their jobs without further instructions, and therefore a procedure may not be needed. Guidance for writing and issuing procedures is contained in Appendix 3-2.

Appendix 3-3 is a sample procedure that can be used to develop your own format and style.

5. DOCUMENT CONTROL

In almost all cases, it is important to control developed documents. The user needs to be assured that he or she is using the latest approved version. Many accidents have resulted from using old procedures or draft procedures that have not been reviewed. So, a control system including the following needs to be developed.

Numbering System

Documents can be more easily tracked if they are numbered. One idea that works well is to tie the numbers of the policy, program, and procedure together to show that they belong together. For example:

- POL1000.1 Policy Number
- PGM1000.1 Program Number
- PRO1000.1 Procedure Number

If there are multiple program parts or procedures under one number heading, add a "- number" to the above numbers to indicate this.

Numbers should also have revision designations, which are usually letters, with the original having no letter and then starting with "A," "B," and so on. After "Z," the letters can be "AA," "AB," and so on.

The numbers should be on all pages in case pages are separated. Also, if only certain pages change, the user must know which pages were affected by the revision and need replacing Another way to do this is to put a vertical bar in the margin next to the sections that changed to draw the reader's attention to the changed sections.

Date/Page Numbers

The document should always be dated the day it was approved. Some people number the pages "Page 1 of 32" to show how many pages there are. This helps the user know if there are missing pages or not.

Verification/ Validation

This generally applies only to procedures and ensures that the procedure is correct. Verification is the act of ensuring that the procedure can be used as it is written. Many procedures have been written that ask the worker to do something in a sequence that is impossible (i.e., wash hands and then turn on the water). Verification is a "walk through" of the procedure to make sure it works correctly. This should be done by the person who will be using the procedure.

Validation is ensuring that the procedure does what it is supposed to do. This is done by reviewing the procedure against the written requirements to ensure that all requirements are met. This can be done along with the verification step and again should involve the user of the procedure.

Verification and validation are very important parts of procedure development and are many times overlooked as being unimportant. DO NOT TAKE VERIFICATION AND VALIDATION FOR GRANTED!

Review and Approval

The general school of thought on review and approval is that the more people that look at the directive and approve it, the better it is. Actually, the opposite is true. As the number of reviewers/approvers increases, the more each person assumes that someone else will catch any problems. This is not to say that the document should not be reviewed.

Be careful in choosing your review/approval group. In general, representatives of those who will be using the directive should be involved, as well as the writer, and, most importantly, the responsible manager. The person who is ultimately responsible for the policy, plan, or procedure should be the approving person. It is the approving person's responsibility. This should be in writing.

Other Ideas

Colored Paper. Some facilities issue policies, plans, and procedures on different colored paper to distinguish them from each other (e.g., yellow for policy, green for plans, and blue for procedures). This is just another way of communicating document type to the user.

Electronic Documents. Some facilities with computer networks have abandoned paper copies of policies, programs, and procedures and electronically provide these to the user. This is generally acceptable for plans and policy. However, it can discourage the use of procedures by the workforce, since it is impractical to carry a personal computer to the worksite. Those work areas that routinely use procedures should be provided with updated, controlled copies for their use.

Flowcharts. Sometimes it is easier to explain how the process works by developing a flow chart. This is a "map" of the process with explanations for each step. Flowcharts give the user a graphic overview of how the process works. An example process flowchart is shown in **Appendix 3-4**.

Checklists. When the procedure must be followed exactly, it is sometimes helpful to the user to have a checklist that ensures all parts of the procedure have been completed in order. **Appendix 3-5** is an example of a checklist. □

APPENDIX 3-1

SAFETY AND HEALTH PROGRAM ELEMENTS

MANAGEMENT COMMITMENT

Senior Management Commitment

Safety and Health Organizations

Safety and Health Program

Safety and Health Professional Staff Qualifications

Safety and Health Policies and Procedures

Compliance with DOE-prescribed Safety and Health Standards

Active Management Involvement

Host/Tenant Responsibilities

External Communications

EMPLOYEE INVOLVEMENT

Employee Rights

Employee Responsibilities and Personnel Accountability

Safety and Health Program Promotion and Employee Involvement

Safety and Health Concerns Reporting System

Safety and Health Committees

WORKSITE ANALYSIS

Analysis of Facilities, Processes, or Equipment

Compliance Inspections

Performance Analysis

Assessment and Appraisal Programs

HAZARD PREVENTION AND CONTROL

Hierarchy of Controls

Access and Exposure Controls

Hazard Abatement Program

Medical Care and Surveillance

Emergency Preparedness and Response

SAFETY AND HEALTH TRAINING

Training Needs

Visitor Orientation

Employee Safety and Health Training

Safety and Health Manager and Supervisor Training

Qualifications and Site-specific Training of Employees

SAFETY AND HEALTH DOCUMENT HIERARCHY

[Where technical and standards-mandated programs/procedures can be found.]

GUIDANCE FOR WRITING AND ISSUING OSH PROCEDURES

Procedures translate technical, management control, and safety requirements that apply to facilities or equipment into action. Users are expected to absolutely follow procedures; therefore, procedure writers are obligated to ensure that users can safely and efficiently complete the process without difficulty and without undue reliance on other procedures and documents. Consequently, each procedure should be designed and written to the following:

- Allow the user to be certain that the procedure is the correct one for the job.
- Make the procedure easy to use.
- Clearly organize the steps needed to complete the task.
- Give clear directions that enable users to complete tasks.

Procedure development is a challenging endeavor. Outlined below are some of the preliminary steps in procedure development, specifically defining the process that will form the procedure.

- Identify the purpose, applicability, and appropriate "owner" of the procedure.
- Bring "owners/workers" into the effort early. Workers should have an integral role in the development of procedures they will be following.
- Initiate the procedure history file.
- Research the requirements that affect the procedure and identify management decision points.
- Begin defining the desired process and identify the participants.
- Determine the need for implementing procedures.
- Determine the impact of the proposed process on affected organizations and initiatives.
- Develop process performance measures.
- Develop an implementation plan.

Once the procedure owner has clearly identified the purpose of the management control procedure, either the owner or the procedure writer must assemble and review any documents that contain direct requirements and commitments that will apply to the procedure. Other documentation that may be useful in developing the process is also reviewed. This research may require examining any or all of the following:

- Federal statutes, applicable regulations, consensus standards, industry reports, and technical literature
- DOE rules, Orders, and standards
- Management basis documentation, including policies, charters, Memoranda of Understanding (MOU), and other documents that define the facility's overall commitments
- Documentation of management control, technical, and design bases (if they exist) and program descriptions
- Documentation of lessons-learned and operational experience that may be relevant to the procedure

 Procedures that describe similar processes, including procedures from other organizations, facilities, or industries

Procedures Management

To be effective, procedures must be managed after development. The procedure owner has several duties. He or she must be diligent in ensuring that the procedure is kept up-to-date when organizational changes occur or new programs and processes are implemented that affect the procedure. The owner must ensure that the process presented in the procedure is effective and efficient.

The procedure system provides integration with other management control programs. Procedures represent one component of a complex array of controls that management uses to promote its philosophy of operation. One application of procedures and the procedure program is to coordinate and integrate related management control activities. This integration includes flowdown of requirements, visibility of commitments, definition, integrity of the safety envelope and associated management control systems, and expression and reflection of other critical basis information.

Flowdown of Requirements and Commitments

Established procedures represent a way that a facility complies with requirements and commitments imposed from outside. To accurately reflect requirements and commitments, a hierarchical document structure must (1) allow traceability from the document in which the commitment is generated to the document in which the facility accepts obligation and (2) include successive levels of documents (e.g., policy, programs, procedures) that document compliance and implementation.

Depending on the type and significance of the commitment, the flowdown may begin at the policy level and extend to procedures, or it may affect only the procedure level. In some instances, the commitment may flow from management control procedures through the supporting technical and emergency procedures. This flowdown of requirements and commitments, irrespective of the number of document types affected, needs some form of tracking or retrieval mechanism, such as a commitment log, indexing system, or derivative numbering system for documents. Without such a mechanism, problems may arise in either direction. For example, a requirement may be accepted at an upper level but not be implemented in the procedures, or a procedure may be amended during a revision or review cycle and a requirement or commitment inadvertently deleted or modified.

Before actually writing a procedure, it is important to research requirements, assess the application of the procedure, and recognize the users' needs for each procedure. Answers to the following questions are a beginning step to determine those needs:

- What requirements are to be met? How does the procedure fulfill technical and management control requirements and commitments?
- What materials, equipment, and facilities are to be used? What is necessary for the activities to be performed?
- What tasks are to be accomplished? What precisely must be done?
- What are the hazards, and how do you control them?
- What hazards must be monitored and recorded?
- Why must the tasks be accomplished? What is the relationship of this procedure or task to other related procedures or tasks?

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- Who, other than the user, must be involved? Are there other individuals or organizations that contribute to completing the tasks?
- When are the tasks to be accomplished? Are there specific times or circumstances that dictate when to use the procedure?
- Where are the tasks to be accomplished? Is there more than one location in which activities will occur; are the locations evident, easily accessed, and distinctively marked?
- How are the tasks to be performed? Are there different methods or techniques available to complete the tasks?

Preparing to Write a Procedure

The following checklist briefly describes the activities that should be completed before writing a procedure.

- 1. Establish the research and planning process.
 - Identify work planning team composition (e.g., safety professional, industrial hygienist, production engineer, employee).
 - Identify the type of procedure to be written. (Is it a management control, technical, or emergency and alarm response procedure? Technical procedures as used in this guide include operating, maintenance, and surveillance procedures.)
 - Plan the research process.
 - Document the technical basis of the procedure.
 - Establish a record of the methods, calculations, user feedback, and other pertinent data collected during the development process.
- 2. Determine the requirements applicable to the procedure, with an understanding of the technical and management control basis of the procedure.
 - Research upper-tier documents, such as DOE Orders and facility policies, that contain direct requirements and commitments.
 - Determine the technical requirements that may apply by examining
 - approved vendor information
 - other procedures that perform similar functions, including those that may be obtained from outside organizations
 - technical literature and specifications
 - engineering documents
 - records of the basis for and development of methods and calculations
 - nuclear safety documents, such as operational safety requirements and safety analysis reports
- 3. Determine the conditions under which the procedure will be performed.
 - Watch as someone uses a similar, existing procedure, and note any information that is not apparent when reading the procedure.

- Research potential hazards and problems in performing the activities by conducting a job safety analysis or other hazard analysis.
 - Interview potential users to assess varying degrees of experience.
 - Learn about past problems.
 - Obtain suggestions on ways to improve the process.
- Determine how often and to what extent the procedure must be used.
- Consider the consequences of improperly performing the procedure.
- Identify the management control processes, such as verifications, inspections, and notifications that interact with the procedure processes.
- Perform job safety analysis to identify hazards.
- Ensure that all pertinent safety rules are included or that other appropriate sources are referenced.
- 4. Determine the level of detail necessary to allow the user to perform the procedure correctly.
 - Determine the principal performers and other participants, including support functions (e.g., health protection personnel, inspectors).
 - Assess
 - the performers' familiarity with terms, abbreviations, acronyms, and symbols
 - the completed general and specific training, as well as additional training needed by the principal performers
 - the comprehension level of the performers based on their expected training and qualifications
- 5. Develop the process section of the procedure.
 - Divide the process into activities, divide the activities into tasks, and divide the tasks into step-by-step actions.
 - Determine the responsible parties for each of the actions and validation requirements.
 - Establish a detailed outline containing
 - a clear statement of the overall purpose, as well as clear purposes for each activity or section of the procedure
 - other documents, forms, and definitions that are necessary for understanding or performing the requirements or processes of the procedure
 - detailed section/subsection headings
 - Group activities in order of performance.
- 6. Assemble the results of the planning research into a reference package.

This package will demonstrate which requirements the procedure supports. The package may also be used to simplify the review process, develop subsequent revisions, resolve audit findings, assist in development of training materials, and provide useful trending information.

Model Procedure

Note: The procedure has been abbreviated for conciseness; all sections are not fully shown.

Procedure 51 - Fire Alarm System, Inspection

Date: 1/2/94

1.0 Commitment

The Fire Alarm System shall be operable when

- A. AC power is supplied to the system.
- B. DC power is supplied to the system.
- C. All alarm initiation devices are installed and operational.
- D. All alarm indicating appliances are installed and operational.
- E. All signaling line circuits are in service and operational.
- F. The control panel is cleared of any faults, alarms, supervisory signals, and trouble conditions.
- G. All supervisory initiation devices are installed and operational.

2.0 Applicability

At all times.

3.0 Operational Requirements

The system is energized with primary and backup power; the manual fire alarm stations are operational and located in all required locations; the audible and/or visual alarming indicating appliances are...

- 4.0 Maintenance, Testing, and Inspection
- 4.1 Inspection
 - A. Inspect the entire system semi-annually to verify that each device is in good physical condition and there are no changes to affect its performance.

4.2 Testing

- A. The control panel shall be tested monthly in accordance with the manufacturer's recommendations.
- B. Each fire sprinkler initiation device shall be tested bimonthly to verify that the signal is transmitted.
- C. Each supervisory initiation device shall be tested semi-annually to verify that the signal is transmitted.
- D. Each manual fire alarm station...

4.3 Maintenance

A. Any device that fails a test or inspection shall be repaired or replaced in accordance with the manufacturer's instructions.

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5.0 Corrective Action

- 5.1 Impairment: Notify facility management, the fire department, and other appropriate organizations and complete the following:
 - A. If A or V and one of the other commitments are not maintained, all hazardous operations shall be stopped, or
 - B. A recorded fire watch shall be started within 1 hour of the outage, or
 - C. An alternate means of...
- 5.2 Inspection
 - A. The system shall be visually inspected prior to returning to service.
- 5.3 Testing
 - A. The fire detection devices shall be tested to verify that a fire can be detected.
- 6.0 References
 - A. USDOE 5480.4
 - B. USDOE 5480.7
 - C. NFPA 72
 - D. NFPA 72E
 - E. NFPA 72G
- 7.0 Basis

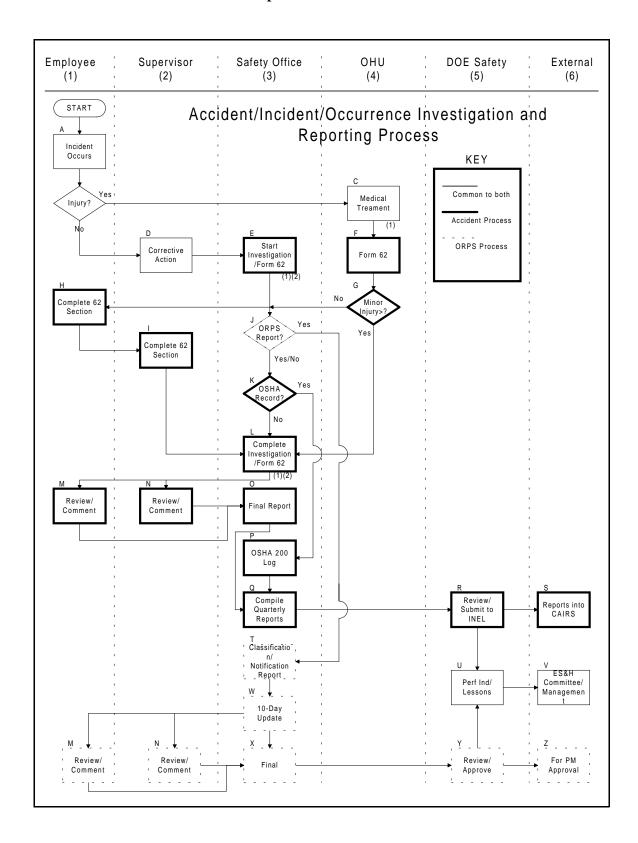
The operability of the fire alarm system ensures that the condition causing the alarm is reported to occupants...

8.0 Records

Records showing the system design and all inspection and testing shall be maintained for the life of the facility.

APPENDIX 3-4

Sample Process Flowchart



Draft 1/14/97: Change 00

Example of a Checklist

EMERGENCY OPERATIONS CENTER COORDINATOR Checklist for Use with Procedures P5500.3-12A Date: EOC Coordinator (signature) Initial the step when it is completed. Step Description Completed Initial Steps: 1. Emergency operations center staffed. [] 2. All communications equipment working. [] 3. Initial briefing conducted. []4. Offsite agencies notified. [] 5. Communications established with Incident Commander. [] 6. Site evacuated if needed. [] 7. Initial press release issued. []8. Event categorized. [] 2nd 5th Each Hour: 1st 3rd 4th 9. EOC briefing conducted. [] [][] [] 10. Offsite agencies updated. [] [] [] [] [] 11. Second press release issued. [] [] [] [] [] 12. Director updated on event. [] [] [] [] At 5 hours: 13. Decision to call in second shift. []14. Provisions for food and break for EOC. [] After Emergency Is Terminated: 15. Decision to terminate emergency. [] 16. Final press release. [] 17. Final update to Director. [] 18. Final notification to local agencies. [] 19. Reentry/Recovery Plan completed.

20. Final occurrence report.

21. Standdown and deactivate EOC.

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